

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

AMENDMENT THREE

1. Incorporated is site visit sign in sheet dated 17 Jan 2004.
2. Incorporated herein is minutes from site visit dated 17 Jan 2004. Note: minutes are information only and will not be part of the contract.
3. Note: Clarification from site visit question. If you are a large business, and your offer is \$500,000 (\$1,000,000 for construction) or more you are required to submit a subcontracting plan with your proposal. Award will not be made under this solicitation without a subcontracting plan approved by the Contracting Officer. This is a construction project.
4. Revisions to Section 00110 Table of Contents page 00110-1 only. Page 00110-1 is revised to make the following change: No. 4, Drawings that show proposed routing and method of construction of the aerial distribution system, of section A. Technical Evaluation Factors of 2. Evaluation Factors is deleted in its entirety. No. 5 Past Performance in Implementing subcontracting Plans replaces No. 4.
5. Revisions to Section 00810; DESIGN-BUILD CONTRACT PROCEDURES.
6. Revisions to Section 00820; STATEMENT OF WORK.
7. Revisions to Section 01320; PROJECT SCHEDULE.
8. Proposal due date remains March 2, 2004 at 2:00 p.m. local time.
9. The attached revised specification sections supersede and replace the corresponding specification sections. Specification changes are generally identified, for convenience, by strikeout for deletions, and underling for text additions. All portions of the revised or new pages shall apply whether or not changes have been indicated.
10. For bidder inquires go to www.projnet.org.
11. NOTICE TO OFFERORS: Offerors must acknowledge receipt of this amendment by number and date on offer or by telegram. Please mark outside of envelope in which your offer is enclosed to show amendment received.

Encl:

Site visit sign in sheet
Site visit minuets
Revision to Section 00110 (page 00110-1)
Revision to Section 00810
Revision to Section 00820
Revision to Section 01320

(End of Summary of Changes)

DESIGN/BUILD
ELECTRICAL POWER LINE UPGRADE
HOWARD HANSON DAM,
WASHINGTON

PREPROPOSAL CONFERENCE
TUESDAY, FEBRUARY 17, 2004
W912DW-04-R-0007

Reported by: Barbara Jacobson, CCR
License No. 29906

MR. SMITH: I'm Alex Smith, contract specialist with the Army Corps of Engineers, and I'll be the contract specialist on this project. I'd like to welcome you to this preproposal conference. The meeting minutes and today's attendance list, these will be posted to the solicitation by amendment for information purposes only. Comments, clarifications made today will not change the solicitation in any way. Any required changes will only be made through written amendments incorporated as a part of this solicitation. Amendments will be issued via e-mail, so please make sure you're registered at our website. And/or you have -- whoever's registered in your office, let them know to be forwarding that to you. And before I go any further, I'm going to turn it over to Brian King from Tacoma.

MR. KING: You noticed when you came through the gate this is Tacoma watershed. And you noticed when you first came up the first mile all the work that we're doing is for the intake facility. This being a watershed, the security is fairly tight in here. So for the winning contractor, the permits, we'll know everybody that comes in and out. You'll be checked in and out every day. So what that really means is the people that have anything to do with this contract are welcome, but there are no riders or no family members that will be coming in. You're also working right next to the river, and our intake is just very, very close by, so, you know, you need to use the bathroom facilities and your equipment should be in really good working condition with no oil leaks. Because anything you do that gets anything in the water, it's only going to take 15, 20 minutes to reach our intake. So, like I said, you need to be very, very careful working in and around the river. And this being the watershed, for this contract everybody needs to be where they need to be. I mean, they shouldn't be further up in the watershed; just within the confines of your work area. Because, like I said, you will be checked in and checked out every day.

MR. GOSS: Thanks, Brian.

MR. SMITH: Okay. When we get to questions, state your name and your company name before asking the question during the conference or you may submit written questions to myself. And, again, with the written questions, submit your name and your company name with that. If there are some questions that may need to be researched before a response can be given, the questions and answers will be posted by amendment. I'll cover it in a minute about your questions, e-mailing your questions in on the ProNet. ProNet is www.projnet.org, and you'll need to go on and register there to send your questions in. And once they get to us, different engineers that are working on this project will respond to your questions and give you an answer. And if it is a question that is a technical question that needs an amendment, then it will be answered by amendment to the solicitation. The project includes all design and construction to provide electrical upgrade to Howard Hanson Dam, Washington. Replacement of existing medium voltage aerial electrical distribution system with a new aerial system and

installation of medium and low voltage underground distribution systems within the project site. Phasing and project schedule must be compatible with dam operations at all times. I'm going to pass what I'm reading from -- I'm not going to read everything in here, but I have some copies and I'll pass them out to you and you can read a lot of this for yourself. This solicitation is an RFP, a request for proposal.

There is no public bid opening. So the date for the opening or closing, when it comes in to us, we're not going to sit in a room and open those bids. This RFP requires a submission of a technical and price proposal. You need to look in the RFP at section 00110. The RFP closes March 2nd, 2004, 2:00 p.m. local time. And the address is on there, and I have the address here to my attention or you can bring them to the building. Just remember when you come to the federal building that there are high security measures, that you'll need to

make sure you're there ahead and you're not held up downstairs by security.

No offers will be accepted after the date that the RFP

closes. Make sure that you use the standard form 1442. Solicitation offer and award must be signed by an official authorized to bind your company. Make sure you read again and submit the information required in section 110. You also need to make sure you acknowledge receipt of all amendments. Section 110, proposal and evaluation. The contract will be awarded to a firm submitting the proposal that, A, conforms to the RFP; B, is technical acceptable lowest offer; and determined to be in the best interest of the Government. Proposal preparation costs will not be incurred by the Government. Debriefings may be requested. All of that is in writing. You have a certain period of time before you

can -- that you can request a debrief. Evaluation factors for award. The criteria in this 110 are relevant experience of the prime firm, qualifications of key team members, past performance, customer satisfaction and timely performance, and past performance in implementing subcontracting plans. The one difference that you're going to see -- and in the next amendment I'm going to post this -- is in the original solicitation there is a four as drawings as part of the criteria, and they're being deleted; they're not part of this. So you make sure you check for the amendment that will cover that.

UNIDENTIFIED SPEAKER: Just a second. You're deleting those drawings entirely? Are you replacing them?

MR. SMITH: The requirement for you to submit the drawings. It's listed in the table of contents, but it's not listed in the rest of the package itself. We took them out and somehow the text didn't fully take it out in the table of contents. So check that and you'll see -- it'll explain that in the amendment forthcoming. For the evaluation factors, read the descriptions of the evaluation criteria thoroughly, ensure proposal is complete and reflects all elements required by the solicitation. Technical proposals are evaluated on their own merit and

against the evaluation criteria only, not against other proposals. Proposals submitted are in two parts: again, technical and price.

Technical evaluation factors will be evaluated on an Acceptable/nonacceptable basis only. Acceptable: An acceptable rating indicates the offeror has provided sufficient information to meet the minimum qualifications or standards. Nonacceptable: A nonacceptable rating will be a response to criteria that is considered not to meet the minimum qualifications or standards. Price evaluation will be evaluated for reasonableness and assess

the offeror's understanding of the contract requirements and any risks inherent in the offeror's approach. It is the intent of the Government to make an award based on initial offers without further discussion or additional information. The Government shall evaluate all proposals in accordance with FAR 15.303(a), competitive range. We're going to try to award this without it, but should it go there, then it will be in accordance with 15.303. And now that I've bored you pretty good with all the technical, I'm going to mention one other thing, and that's special contract clauses, section 800. And in it you need to make note and be aware that unique to this requirement, commencement of this contract: The awardee will commence work within ten calendar days of the date the contractor receives notice to proceed. Completion of work: The entire work completed no later than 150 calendar days after the contractor receives a notice to proceed. You know this is a Davis-Bacon job, so we'll incorporate all the latest wage rates. Again, I'll have copies of this that you can pick up before you leave. The one other thing before I pass it to questions is that we posted amendment two --

MR. GOSS: Friday afternoon.

MR. SMITH: -- Friday afternoon, and you can either download it or we brought some extra copies for you to have it now, and you can pass those around. And what the amendment does -- it changes real estate on one section?

MR. GOSS: Yeah. Well, basically, we want the layout of the new line to follow the existing line, and we don't want deviations from that. And I had one other statement to make also. We have communication lines also on the poles. And they're Qwest lines. We have a representative from Qwest here; Steve. And what we are looking for is to temporarily relocate and attach those onto the new poles. And then Qwest would make a permanent connection or attachment to those poles. Do you want to clarify that a little, Steve?

MR. CROW: Yeah. The line guy that actually does the line construction wasn't able to make it today, but I asked him a couple of questions that he would be trying to present to you. We want to attach the cable to the poles. We need to tension the cable properly onto the new telephone poles. Our cable is heavier and we don't want to let that work go. We don't want to contract that out. So we're going to do that. And so in doing that, we need to let whoever knows that on the straight line, straight poles, that our cable would just be tied up to the pole, and then we would come and attach it properly later.

UNIDENTIFIED SPEAKER: You don't want it J hooked on there?

MR. CROW: No. Just tied on with a rope. And then on the corner poles, we would need to have 48 hours notice on corner poles so that we could come out and attach those at that time because they can't be tied up.

UNIDENTIFIED SPEAKER: All corner poles?

MR. CROW: Yeah.

UNIDENTIFIED SPEAKER: What angle is that?

MR. CROW: Well, that's usually anything more than three degrees.

UNIDENTIFIED SPEAKER: Then you'll probably be up here all the time.

MR. CROW: Well, it could have a little bit of variance. If something is guyed now -- and we're going to be putting telephone -- new poles basically where the old poles are, so if the old pole is guyed, then that's a corner pole and we're going to need 48 hours. That would be one way of looking at it.

UNIDENTIFIED SPEAKER: Are you putting your own poles up? Are you going to hang your permanent --

MR. CROW: We're going to be using --

UNIDENTIFIED SPEAKER: The new poles.

MR. CROW: -- the new poles that are being placed --

UNIDENTIFIED SPEAKER: Okay.

MR. CROW: -- we're going to be attaching those.

UNIDENTIFIED SPEAKER: You're going to put the guys up, though, for the telephone --

MR. CROW: No. I think that that may be contracted out.

MR. SMITH: Okay. If you're going to ask questions, give us your name and your company name so we can get that documented.

MR. CROW: Okay. Then I guess I can say right now then that there will be guys since that would be something that would be unique to our needs. We'll be doing the guying. But I think that some earlier discussion included that maybe the contractor would be guying some of these poles. Maybe I'm remembering wrong. But I guess we'll be guying unless there's some other --

MS. GARDNER: I'm Ruth Gardner with the Corps. That's correct. But we went back and forth as to whether --originally I thought that our contractors would be doing the entire job, the attachment of the communication --

MR. CROW: Oh, okay.

MS. GARDNER: -- and the down guys. If you want to --

MR. CROW: Then we'll be guying.

MS. GARDNER: -- yeah, if you want to attach your common, you're pretty much going to need to decide where you're --

MR. CROW: Right.

MS. GARDNER: -- you're the only one that's going

to know where your guy needs to go.

MR. CROW: Okay. So we'll be doing all the guying. I do have one question since I am talking. How tall are these poles going to be? How much taller than the existing poles?

MS. GARDNER: I believe the contract calls for 50 foot.

UNIDENTIFIED SPEAKER: Yes.

MS. GARDNER: Again, it is design build. In other words, if you have an instance where you feel it needs to be higher, put it in your design. It's a minimum of 50, I believe.

MR. CROW: Okay. And what do we have there now; 35?

UNIDENTIFIED SPEAKER: It's 40, probably.

MS. GARDNER: I think they are 40s. We can stop and look at a belly button on the way down.

MR. CROW: All right. That's all I had.

MR. GOSS: When submittals come in, we can let you know if there's any deviation from that 50 foot, Steve, once we get the submittals in and go through and then when we make our selection.

MR. CROW: Okay.

MR. SMITH: Okay. Before we go to the rest of the questions, do you need to get all the Corps employees' names? It would help, wouldn't it?

MR. WRIGHT: Dave Wright.

MR. BOYLE: Bill Boyle.

MS. GARDNER: Ruth Gardner.

MR. GOSS: Bill Goss.

MR. SMITH: And I'll open it up to questions, and all these ladies and gentlemen will answer them.

MR. MARGASON: I'm Gary Margason with Portland General Distribution Services. This question is for Qwest. I noticed that your line was on some of the poles and not on some of them. Do you have a design that will show us which poles you're attached to?

MR. CROW: Yes, I do. We have -- the job that we use to attach where it is currently, we have the poles and diagrams of that.

MR. MARGASON: I'm just wondering which -- how many poles do we need to worry about?

MR. GOSS: What we -- and correct me, Steve, on this one -- we would replace all the poles for the current electrical system. And I believe Qwest put in

some intermediate poles in some areas to get extra height or clearance where they needed to. Those poles would not be replaced or dealt with under this contract as far as replacement or removal - the existing ones that are just Qwest poles on Qwest lines.

MR. MARGASON: But I noticed coming up to the end that they weren't on your poles. And I'm just curious how many there --

MR. WRIGHT: Well, there are several -- Dave Wright with the Corps. There are several locations where the phone line deviates from the power line. So it would be incumbent upon the award winner to, when he figures up his line, if that existing phone line is now attached and his pole is going to be closely adjacent, to reattach it to the new pole. So you've got to think ahead a little bit.

MR. MARGASON: But are we going to know that before the bid? Because when we -- driving up here, we wouldn't know how many poles they're attached to. If we can figure out how many we have to deal with . . .

MR. WRIGHT: Well, again, you're going to tie -- you're going to rope them off and Qwest is going to come back and attach. Is that what we decided to do?

MR. CROW: Yes. So it's whatever the design is now is the way it's going to remain afterwards, just with taller poles, basically, in the same location.

MR. WRIGHT: And if you want to count poles, we can count poles.

MR. CROW: But there are places where we deviate and don't take the same path as the road and then come back. With the taller poles, now, we'll be able to eliminate some of these intermediate poles that are trying to maintain the height now. So some of that design would change. So there would be some poles that would be eliminated because we can maintain height with the higher poles. Probably five or six or so. At least five. So that's going to be something that has to be realized, I guess, as we go along. I think the height that we're trying to maintain for logging trucks here or communication cable as it crosses the road and stuff, and even alongside the road, is 18 feet.

MS. GARDNER: Yes.

MR. CULBERTSON: George Culbertson, EDS. Related to those intermediate poles, whose responsibility will it be to remove those intermediate poles? Will that be Qwest or the contractors?

MR. GOSS: The intermediate poles that are only supporting the Qwest lines would be Qwest's responsibility to remove.

MR. MARGASON: And the contractor's removing -- Gary Margason. So the contractor's removing all the old poles for you?

MR. GOSS: Yes. And disposing of them.

MS. GARDNER: And I've just been corrected on that height. They do want 20 here.

MR. CROW: 20?

MS. GARDNER: 20.

MR. GOSS: 20, that's for logging truck clearance and the phone line?

MR. BOYLE: For logging truck and equipment.

MR. MORRISON: Mike Morrison with Evergreen. Salvage material belongs to who?

MR. GOSS: The contractor.

MR. CRAFT: Mike Craft with Salish. What about the transformers, have they been tested for PCBs? What about disposal of them?

MS. GARDNER: We can check 16375 to see if it's included in there. If not, you will be responsible for testing -- you're going to have to test anyway -- test and also disposal. When we go back and I go ahead and look in -- I'm not counting it'll be on the name plate, but I'll take a look. Otherwise, you will be responsible for testing and disposal.

UNIDENTIFIED SPEAKER: You're saying then if they --

MR. GOSS: Could we get your name and --

MR. FULLETON: Oh. Pat Fulleton with Fulleton Pacific Construction. So if we test high on PCBs, then we'll just make that guess into the estimate or are you going to supply information that they have been tested? There's quite a difference in cost.

MS. GARDNER: I understand that.

MR. BOYLE: I'm not aware that they've ever been tested.

MR. FULLETON: Do you have an age that you can provide to us?

MR. BOYLE: Oh, I'd say 1959, '60.

MS. GARDNER: On the way back, we'll go back and look at the serial number and that might give us an indication of the age.

MR. WRIGHT: Folks, I think reasonably it would be a good assumption to presume with the age of these transformers that they're PCB contained and build that cost into your proposal. And if at some point later they are test and proved not to be, then we can discuss that at that time.

MR. CULBERTSON: This is George Culbertson, EDS. The existing poles, do they contain copper arsenate or creosote; are they considered to be hazardous as well?

MR. WRIGHT: Well, again, you would have to presume from the age of these poles that -- and a majority of them are more than 20 years old -- you'll have to presume that they've been treated with hazardous materials and react accordingly and build that cost into your price.

MR. MARGASON: Gary Margason, Portland General Distribution Services. Is the existing wire copper or is it copper clad?

MS. GARDNER: It's copper.

MR. MARGASON: Copper?

DAVE WRIGHT: Dave Wright with the Corps. It's funny wire that I've never seen before in my 30-some odd years in this business. It's three-strand twisted and just is twisted on itself. It's medium drawn. And I've never seen anything like it.

MR. FULLETON: Pat Fulleton with Fulleton Pacific. Is one of those steel?

MR. WRIGHT: No, sir.

MR. FULLETON: They're all copper?

MR. WRIGHT: Um-hmm.

MR. MARGASON: And it's No. 6, correct?

MR. WRIGHT: Correct.

MR. CRAFT: Mike Craft with Salish again. Whatabout flagging on that road, are we to assume that we're going to have to have 100 percent flagging all the way?

MS. GARDNER: Yes.

MR. BOYLE: And to let you know -- I'm Bill with the Corps -- to let you know, there are plans in the works for a start date of about mid March for two logging outfits. I mean, this is a logging area. So you will have logging traffic to deal with also.

MR. WRIGHT: As well as another contractor is going to be starting, within the month, a huge project we have going here, and there will be considerable traffic then.

MR. BOYLE: And I know that in your proposal package there is a note -- and I don't remember the section -- that says you will use CB channel ten. So that will mean that every vehicle you have on site will have a CB in it and it will be on channel ten. And every mile marker you call out on your way in and on your way out at night so you guys can avoid hitting each other head on or a logging truck head on.

MR. EDGAR: Don Edgar with Potelco. Is everything going back in new if we're going to follow the existing right-of-way? The anchors -- we can't use the old anchors if we change the pole out? If it's a rock anchor and -- does everything got to be new?

MS. GARDNER: That was the intent, yes.

MR. BOYLE: I would say no to that question just because I know what kind of condition most of the rock anchors are in. New would be much better and preferred.

MR. WRIGHT: Dave Wright with the Corps. This has been here 40 some odd years now, and it's served well, but its life is over. We want a new system that's going to last another 40 years.

MR. EDGAR: Don Edgar with Potelco. Going up over the hills and dales, can we build right-of-way roads in there in the watershed or how are we going to access those pole lines?

MR. BOYLE: Bill with the Corps. You're talking about the section that leaves from the bridge and goes up and over the top and then comes back out across the river?

MR. EDGAR: Yes.

MR. BOYLE: How are you going to get your equipment in there?

MR. EDGAR: Yes.

MR. BOYLE: There's an access road from the Massey Gate side, which is the side we're on currently, that was built I don't know how long ago. You may have to cut some --

MR. EDGAR: Is it still in good shape?

MR. BOYLE: No. You may have to cut a couple smaller trees out of the way. It was a road at one time. It's our only access to that portion of the job.

MR. EDGAR: Okay.

MR. WRIGHT: As well as -- you'll have to cross Burlington Northern as well.

MR. EDGAR: We've got to get permission from Burlington Northern?

MR. WRIGHT: Using our access, our right-of-way access.

MR. KILGROW: This is Sean Kilgrow with Potelco. Should all the clearing and grubbing and survey be included in the design portion of this?

MS. GARDNER: Yes.

MR. CULBERTSON: George Culbertson. Clarification on that. It's included in the scope, but is it included in the design or in the construction portion?

UNIDENTIFIED SPEAKER: Pricewise.

MR. GOSS: I would say include that in the construction costs.

MR. CULBERTSON: Clearing, grubbing and --

MR. GOSS: Yeah. And clarification on the grubbing, we want clearing, we want stumps and stuff ground to ground level, but we don't want like an outright grubbing, and we don't want a bunch of dirt turned, and we don't want uncontrolled runoff in any cleared areas. So we want the brush cut, we want it chipped and spread out within the right-of-way. And there is language in there for salable timber, certain size. And there's also language in there for stuff that would be cut for firewood. And then the rest of the stuff chipped on site. But we don't want you going in there and tearing up the root balls and exposing a lot of dirt and creating runoff problems because siltation will be a problem within the river and the reservoir.

MR. WRIGHT: Dave Wright with the Corps. If you notice on the way out, we recently have pruned the line. And you'll see we just went about 15 feet -- a 15-foot box around the lines, is what we did. And even at ground, we didn't go all the way down and grub. We just left a couple inches there. And that's not to disturb the soil because then creates turbidity in the water and problems. Trust me, we will not disturb the soil other than to dig holes. We will have no turbidity in the water.

MR. FISCHER: This is Thom Fischer with Constructionaire. So is that your expectation of the permanent line?

MR. WRIGHT: Um-hmm.

MR. FISCHER: And who's the contractor that's coming in a month?

MR. WRIGHT: Traylor Brothers, Inc.

MR. FISCHER: Okay.

MR. FULLETON: Pat Fulleton with Fulleton Pacific. What is Traylor Brothers going to do?

MR. WRIGHT: They're excavating for a new facility adjacent to the existing tower out here. They're doing phase one, which is making the footprint for it, building the cofferdam and the beginnings of the tunnel for that.

MR. CLUTE: Curtis Clute, Casne Engineering. Under your contract procedures, section 810.2.2.2, it says any registration in any state is acceptable for affixing registered stamps for the documents or is that specific for the state of Washington?

MR. GOSS: Our contract says any state, and it's a federal job, and typically we don't ask for the state you're working in, just a registered engineer professional.

MR. FISCHER: Is that how federal contracts are?

MR. GOSS: I don't know if that's how they all are.

MR. WRIGHT: Point of interest; you guys can use this information however you wish. When the city built their line over the hill behind their operation that goes over to where they're building their new intake facility, they flew those poles in. Dug the holes by hand, installed culverts and flew the poles in and set them up. That's

extraneous information you can use however you wish or not use.

MR. FISCHER: That was the city of Tacoma?

MR. MARGASON: Gary Margason, Portland General Distribution Services. The percentage -- two percent voltage drop, is that only on the overhead line? That was the way it was implied in the bid.

MS. GARDNER: I think if you get up here and you're only looking at two percent voltage drop, that we're going to be okay throughout the rest --

MR. MARGASON: Just to the end of the overhead line?

MS. GARDNER: That's correct.

MR. MARGASON: And then the power coordination study, is that on the 12 kV plus the 480 volt?

MS. GARDNER: That's correct.

MR. CRAFT: Mike Craft with Salish again. Do we know what the actual load is up here right now, the connected load, and do we know what the load anticipated is?

MS. GARDNER: Not off the top of my head without looking at the drawings. Did we not get -- there's no panel -- there's no loads and panel sketches for the -- we've got motor loads coming.

MR. WRIGHT: Well, we're in the design process right now. Correct me, Bill, before I stumble here. We're in the design process for the finished facility that's going to come here, and I think it's 1200 kVA, that's what we're looking at.

MR. GOSS: I do not know offhand.

MR. WRIGHT: It's a bunch. So this may not be the end of this job.

MR. GOSS: Yeah. There will be significant changes. We'll be putting in a new tower adjacent to this tower for fish passage that will have hoisting, rotating screens, large pumps for fluming fish over the dam. So the load is going to increase greatly in the future.

MR. MARGASON: Gary Margason. But in the specs it said 500 kVA transformer?

MR. WRIGHT: That's right. That's right.

MR. MARGASON: And the line is supposed to be designed for the tower?

MR. WRIGHT: That's correct.

MR. MARGASON: You're saying 1200. I get nervous. Another question. Is there any particular time requirement you're having for all the key people that are on the -- like the project manager, superintendent, the design quality control manager and the CQC system manager -- is there any requirement of how much time they need to be on site or is that up to the contractor?

MR. GOSS: Probably up to the contractor and whatever is reasonable. They aren't all full-time on site and we realize that.

MR. MARGASON: Okay.

MR. GOSS: And then also the people you present should be the ones you use on the job or we may want to reserve the right -- and I believe we have language in there -- if you make substitutions from that, to approve that person.

MR. CLUTE: Curtis Clute, Casne Engineering again. Back to the fault study, do you have available data on the points of connection for available fault currents?

MS. GARDNER: Probably not. For the primary?

MR. CLUTE: Um-hmm.

MS. GARDNER: That just calls for coordination with

TPU or their ratings on their protective devices. Perhaps --

MR. BOYLE: PSE.

MS. GARDNER: I'm sorry; PSE. And I'm sure that information is available to you.

MR. DECAI: Mrinal Decai with Portland General Distribution Services. In the contract there were two places about the project estimate. One was 860,000; in another place it was one million to five million. Which one should we refer to?

MR. SMITH: One to five.

MR. DECAI: One to five?

MR. FISCHER: I didn't hear that. What was the question?

MR. GOSS: Do you have that, can you recall it, or do you want to restate that?

MR. DECAI: Yeah. There were two places in the contract documents that refer to the project estimate. One was 860,000, and another place it was one to five million. And the subcontract plan is dependent on the project estimate, so if it's less than a million, I believe we don't have to submit a subcontract plan. So I assume we do have to submit a subcontract plan?

MR. SMITH: Read it, and I will go back and check it myself, but -- I'm not looking at it, but I believe it states that if you're a large business bidding over that, then you have to submit it.

MR. MARGASON: It wasn't real clear in there. It said 500,000 if it was maintenance and one million if it was construction. So this is considered construction, so then if it's over a million, we have to --

MR. SMITH: I don't know. Where did you see that?

MR. MARGASON: Give me a few minutes. I'll find it. Right here. Page six.

MR. SMITH: Oh, this is the letter from the Small Business Administration. Yes, this is a construction contract.

MR. EDGAR: Don Edgar, Potelco. Is there a construction laydown yard we can use on site or anywhere on the property?

MR. GOSS: Hold on a second. Did you answer this gentleman's question, Alex, or do you need a little time yet?

MR. SMITH: No. It's construction.

MR. MARGASON: So if it's under a million dollars, we don't have to use the subcontractor --

MR. SMITH: Right.

MR. MARGASON: Okay. Great.

MR. GOSS: Hey, Bill?

MR. BOYLE: Yes?

MR. GOSS: We have a question about the possibility of a laydown yard out here.

MR. BOYLE: Uh-huh.

MR. GOSS: Do you know if we have an answer to that at this point and where it would be?

MR. BOYLE: Three and half. The three and a half mile marker.

MR. GOSS: Okay.

MR. BOYLE: Lay down poles, trucks, whatever. There's room there for that.

MR. GOSS: Okay. Is that where we split off for the lower access road?

MR. BOYLE: Um-hmm. That's correct.

MR. GOSS: Okay. We can point that site out or stop there on the way out, if you want. It's a half mile back towards the entrance.

MR. ARTHUR: Bill Arthur, Superior. Do you have any special safety codes that we need to follow in here other than the normal electrical safety code and what we normally work with?

MR. GOSS: Corps safety manual.

MR. ARTHUR: Okay.

MS. GARDNER: The NESC.

MR. ARTHUR: Okay. Just wanted to make sure.

MS. GARDNER: And you'll be perhaps visited by OSHA so keep that in mind. We're not on a military base; you never know when they're going to show up. And, Mike, just to clarify your question on the loads, believe that we called for -- was it a No. 2 ACSR? We'll take a look at it again. But the growth up here, that would be more than sufficient to handle any load that we're going to have in that we've got a gigantic fuse built in downstream and PSE No. 6 solid down there, so -- and what the capabilities are, the substation at this point. So I'm not sure that what we're looking for will handle the load up here, if that was your question.

MR. EDGAR: Don Edgar, Potelco. Do we have to get a non-reclose from PSE every day to work the line hot?

MS. GARDNER: Good question. I would certainly -- were it I, I would work it out so that they could leave it on non-reclose, if they're willing to do that for you in the evening hours. That's something you're going to have to work out with PSE. But certainly you'd want it on non-reclose.

MR. MARGASON: Gary Margason. The tree wire, it was mentioned to have spacer cable. Is that the design you want or do you want it flat on eight-foot arms?

MS. GARDNER: Again, it being a design build, trees have been an issue here, so we definitely wanted to go with the tree wire. If you wanted to submit armless construction, just less of a target.

MR. MARGASON: Okay.

MR. DECAI: Mrinal with Portland General. In the proposal evaluation, the subcontract plan, there's a reference to a C-C-A-S-S. I don't know --

MR. SMITH: CCASS. That -- and there is a site for you to go check and see. If you've done work for the Department of Defense, the Corps of Engineers before, you've been evaluated, and that's where that information is. And when it says that you're not required to submit, that's where we're going to go and we're going to pull all the information that's contained in there. And that's for any job in the United States that you've done for the Department of Defense that they've submitted an evaluation. But you can go look and see what is listed, good or bad, on yourself.

MR. GOSS: Was there a question about the vaults or access to underground here? Bill --

MR. BOYLE: What's that? I'm sorry.

MR. GOSS: I think somebody had a question earlier about access, if we had a vault or how we go underground at the admin building coming this way. What do we have there or don't we have there?

MR. BOYLE: Currently at the admin building there are no means by which to reach the dam structure itself. So you'd be required, obviously, to place a vault and a buried system to a vault that does exist on top of the dam that we installed in 2002 that will bring you all the way to the bridge. And after that, it's in the drawing. You will supply boxes of conduit, et cetera, to get across. But there is a three-vault system. I have a drawing if you choose to look, but it's simplified. There are three vaults out there, large size, and four medium voltage conductors.

MR. WRIGHT: And we can walk around and point to where all that is.

MS. GARDNER: And you might want to pay special attention to the requirements for the four-inch up underneath this deck out here. That's a little tricky, so you might want to take a peek at that.

MR. MARGASON: That's for the entrance to the building here?

MR. FISCHER: Isn't that one four-inch; is that what you said?

MS. GARDNER: Don't quote me on that. I think there might be a spare.

MR. WRIGHT: As a matter of just general consideration -- since Mr. King is gone I'll paraphrase for him a little bit; I know what he'd say if he was here -- be sure you have a good spill kit with you in case something were to go wrong with your vehicle. If you anticipate your vehicle having drips and drops and that kind of stuff, have absorbant material, drip pans. And that's all I'll say Mr. King. For myself I'll just say they won't tolerate any oil on the ground at all. They'll be all over you like a bad memory. It is their watershed. So if you show a little effort to keep the oil off the ground, they'll appreciate it, and we'll all get by better.

MR. SMITH: Are there any other questions?

MR. GEBHARDT: Jim Gebhardt, Strider. What's the nature of the comm cable that comes up here? Is it going to be easy to splice?

MR. CROW: Easy to splice?

MR. GEBHARDT: Well, if you're going to set poles, offset poles and change the alignment somewhat, you're going to probably gain -- could gain distance, so you may not have enough to even move it from one pole to another.

MR. CROW: Yeah, it's relatively easy to splice, yes.

MR. GEBHARDT: Okay.

MR. GOSS: Could you say that last part for her?

MR. GEBHARDT: Yeah. I just was wondering -- because if you're going to offset poles or if the alignments adjust, you could gain distance, so when you try to move the wire, there won't quite be enough to get --

MR. FISCHER: The wire would be short.

MR. GEBHARDT: The wire would be short.

MR. MARGASON: Gary Margason again. Do you care which side of the pole you're on?

MR. CROW: Preferably roadside.

MR. MARGASON: Okay. But what happens if we set the pole and you just have to attach, you know --

MR. CROW: Well, you know, if we have a preference, we'd rather be roadside. But we're going to be able to do -- you know, accommodate, you know, the other side.

MR. MARGASON: Gary Margason. Electronic copies of the plan, is there a site to get that?

MR. SMITH: If you go to our website where you downloaded the plans and specs, there's a planholder's list. And if you go to that planholder's list, the top categories are going to be the plan centers, the plan sites that you can go to to get these.

MR. MARGASON: Electronic copies?

MR. SMITH: Yes. Well, you'll need to contact them to find --

MR. MARGASON: Right.

MR. SMITH: Now, you know you can download that from our site if you've got capabilities?

MR. MARGASON: Oh, okay.

MR. BOYLE: Internet capabilities.

MR. SMITH: We have the software sites, if don't have the different software, that you go to the top and you can download. You just make sure you have the capabilities to print the large prints.

MR. MARGASON: Okay.

MR. FISCHER: Thom Fischer with Constructionaire. I guess this is a question for Qwest and the Corps. This communications cable, is it just telephones and faxes, computers, or is there some life safety dam issue that we -- if that thing got broke in the meantime, what are we dealing with here?

MR. GOSS: You have a -- it's a main trunk line and it -- I mean, it doesn't just service the dam.

MR. CROW: Yeah, it goes on to Lester and services some equipment in Lester. But these aren't high cap. These are just telephone lines. We have a system on there for the mini carrier system called the CM8 that are on there. Nothing high voltage, though.

MR. WRIGHT: And we, the Corps, would follow that up as saying, darn right it's life safety because we're out here on the end of the stick, it's pretty remote, if something were to happen to you or somebody else working on the site, that's our lifeline. Our radios are functional but limited.

MR. CROW: Steve Crow with Qwest. This communication cable does support some equipment in Stampede Pass that supports the FAA for weather. So when any of these equipments go down, we know about it through complaints pretty quickly, within an hour or so.

MS. GARDNER: Ruth Gardner with the Corps. I would also suggest that since we are asking that you stay in essentially the same footprint as the existing line - I don't know that you're going to have that much of an issue with your comm line being too short or too long. In the event that you do run into it, use longer rope unless obviously we've got, you know, a logging truck where you're doing a road crossing issue. I mean, if it's got to be off the pole three or four feet, then so be it, and we'll let Qwest take care of that as opposed to cutting it.

MR. WRIGHT: And remember the Government will be on site and we'll coordinate with you and Qwest. We'll work things out.

MR. MARGASON: Gary Margason. The underground cable, can it be aluminum or copper primary?

MS. GARDNER: I believe that option is in your spec. Do double check 16375.

MR. MARGASON: It just said something about doesn't want any aluminum to touch the ground, but it wasn't real clear about the cable.

MS. GARDNER: Again, your coordination studies say the same, to make sure that your conductor is sized accordingly. Again, do check your spec. I'm not quite sure. Some jobs we allow it; some jobs we don't. Primary is not that big of an issue.

MR. MARGASON: This is the underground primary?

MS. GARDNER: The underground primary, correct.

MR. HART: Keith Hart with Potelco. Will there be another site visit or will this be the last one?

MR. GOSS: This is all we have planned. And if one or two contractors call up, you know, a few days later, the chances are pretty slim. In other words, I don't think we'll have another site visit. If there's something you really want to see, let's try and do it today. And if

there's some sites you want to hit on the way back, like the laydown yard or anything else, let us know now.

MS. GARDNER: Or counting the phone poles out there, too, if you were concerned with that, if you wanted to actually get a count on them.

MR. GOSS: Yeah. And if you swing by here and nobody's here and you stop at the Tacoma gate and want to try and get up and look at something, that's

going to be a no go. They won't let you up. So if you've got something you need to see, let's do it today.

MR. MARGASON: Gary Margason. So we're going to have a tour here showing where you want the generator and transformer and all that stuff?

MR. WRIGHT: Sure.

MR. MARGASON: One other question about oil spills. Are you concerned about containment around the transformers, oil containment?

MS. GARDNER: I'm sorry. I just missed that whole question.

MR. MARGASON: We're real sensitive about the watershed here. How about the pad mount transformers, are you going to want oil containment designed in that?

MS. GARDNER: I don't think there's going to be an issue.

MR. MARGASON: Or the generator?

MS. GARDNER: Or the generator.

MR. MARGASON: Okay.

MR. SMITH: Any other questions?

MR. DECAI: Mrinal, Portland General. There's a section 600 which is for prerequisites for preaward determination, and there's a price determination form and there's a tax ID number. Do you want us to just fill the form just on that itself the way it is and submit it or do you want us to scan like an electronic copy and separate things out?

MR. SMITH: You can take that and fill it in or I would suggest make a copy so if you have to come back later for something. But you can make a copy of that and fill it out and sign it, whatever, and send in that information. Some people -- I would say don't do an electronic because you won't be able to submit it with your proposal.

MR. DECAI: Okay.

MR. SMITH: If that's all of our questions, amendments to this solicitation will be e-mailed to you, again, so check -- you can check our site, check your e-mail for the amendments. Please read carefully the instructions in section 110. And ensure you have completed all

information required by the solicitation package and submit those items with your proposals. Ensure compliance with the solicitation requirements. And the solicitation is only changed by written amendment. Award will be based on technically acceptable lowest offer. And the last thing I'll say is that when we go back down the hill, if you have questions, anything that you want to look at, if you have questions from this point on, write them down and you can give them to me when we get to the bottom of the hill at the parking lot. Or submit your questions to ProNet and we'll get an answer back to you. And that concludes this --

MR. WRIGHT: Alex, I've got one more thing. Just a point of clarification. We wanted to make sure -- we did -- we wanted to make sure that you understood that we have 200-foot right-of-way on either side of the existing. So if it's advantageous and a cost benefit to you to stay on the same side of the road versus where it is now, it's up to you. Do whatever you need to do. But we have 200-foot right-of-way of the existing line on either side, so it can be --

MR. GOSS: All right. Let me make a further clarification. This is sort of the real estate perspective of right-of-way as far as changing it and deviating much even within that 200-foot right-of-way. The wording we have in the latest amendment is to follow the existing alignment as close as possible, and we want to follow that if we can. We probably don't want to start straying 20, 30 feet. There's some problems from the real estate perspective even straying that much within that right-of-way. So we want to try and follow it as close as we can.

MR. WRIGHT: Forget I said anything. Lawyers at work again.

MR. SMITH: Then that concludes the meeting, and here's copies of -- if anybody wants a copy of the general information.

(Conference concluded.)

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SECTION 00810

DESIGN-BUILD CONTRACT PROCEDURES

1.0 GENERAL CONTRACT PROCEDURES

The contract will be conducted in two (2) phases. Phase I is the preparation and review of project design documents. Phase II consists of construction of the new facility designed in Phase I. Construction is not to commence until the Government has reviewed and accepted the applicable design documents for that part of the construction. The Government may allow the Contractor to construct the project in phases, with the Government issuing an interim notice to proceed with construction for portions of the project. Demolition of existing distribution system is subject to specific phasing requirements described in the statement of work.

New facility construction is not to commence until the Government has reviewed the appropriate design documents. The Government reviews the Contractor's design for compliance with the contract. The Contractor is totally and solely responsible for the design, coordination, compatibility, and completeness of each and every phase and compliance with contract requirements. Prior to start of each phase there will be a meeting to discuss Contractor's Quality Control Plan. See Technical Specifications, Division 1, Section 01451 - Contractor Quality Control, for details.

1.1 PREDESIGN CONFERENCE

Within five working days after the initial notice to proceed with the contract a predesign conference will be held to acquaint the Contractor with the general plan of contract administration and requirements under which the design is to proceed. The Contractor shall provide and discuss its design schedule to allow attendees to prepare for key milestone events. The design schedule shall incorporate time for Government reviews as well as any items of work to be fast tracked. The Government will assist with technical input and user input. The Contractor's entire design team shall attend and be prepared to brief the Government on the engineering features and systems for the project.

The Contractor shall keep and distribute conference meeting minutes to attendees.

1.1.1 The Pre-design Conference will be held at the project site.

1.1.2 Attendees will include but not be limited to:

CONTRACTING OFFICER or representatives
CORPS OF ENGINEERS site manager
CORPS OF ENGINEERS project manager
CONTRACTOR's Project Manager
CONTRACTOR's design team
CONTRACTOR's quality control representative

1.2 PHASE I — (DESIGN) REQUIREMENTS

1.2.1 Design Submittals

The Contractor shall prepare and distribute project design documents in accordance with the schedules provided herein. Each submittal shall be in accordance with the requirements of the contract documents and all other terms and conditions of the contract.

1.2.2 Design Reviews

- (1) The Government intends to use no more than 14 calendar days for review of Design submittals. The Government will utilize the DrChecks software system for entering its comments (see paragraph 1.2.4). Following the 14 day Government review period, the Contractor shall use no more than 7 calendar days to review the Government comments and respond using DrChecks. The Contractor's response will specifically describe/address/detail "How and Where" in the design the revision will be/has been made. Only when the Contractor has responded to all Government review comments in DrChecks, will the succeeding one day design review conference be conducted. Design and Back Check submissions found to be incomplete or not in compliance with the contract will be returned to the Contractor for correction and re-submission. Under such circumstances the Government will have an additional 7 calendar day review period, to commence upon receipt of the revised submittals, and there will be no increase in the contract completion date provided. Contract completion time (see contract clause entitled "Commencement, Prosecution, and Completion of Work") includes time for Government review of Contractor prepared project design documents. The Government intends to use not more than 7 calendar days for review of back check submittals.

DESIGN SUBMITTAL SCHEDULE

<u>Submittal Description</u>	<u>Submittal No.</u>	<u>Suspense</u>	<u>Submittal Items</u>
All Design work with Plans and Specifications (developed to 95/100%). (See note 4.)	No. 1	See Note 1	See Note 3
Government Review Time for Submittal No. 1		14 Calendar Days	
Contractor Response to Submittal No. 1 Review Comments.		7 Calendar Days	
Submittal No. 1 Design Review Meeting		1 Calendar Day	
Back Check Submittal for Design (developed to 100%) (Include annotated DrChecks review comments)	No. 2	See Note 2	See Note 3

NOTES: The Contractor shall complete suspense within the above schedule. Suspense is to be measured as the number of Calendar Days after Notice to Proceed (NTP) with the Design. Drawings and all design analysis and calculations shall be stamped and signed in accordance with paragraph 2.2.

1. Submit Submittal No. 1 within 30 calendar days of notice to proceed.
2. The number of calendar days for completion of the back check submittal shall include a mandatory 7 calendar day Government review time as specified in paragraph Design Reviews herein, and a 7 calendar day comment incorporation period that commences upon Contractor receipt of the Government review comments
3. The following table provides the review addresses for distribution of the design documents for each design submittal and identifies the submittal requirements. This list is tentative and may be readdressed/confirmed by the Government at the appropriate design review conference; however, the total number of copies required for distribution will not change. Include 4 sets of the annotated Dr Checks review comments with the Design Analysis for all addresses with this submittal, except when the total number of sets of other documents is less than 4, in which case include a number of sets equal the number asked for the other documents.
4. Although draft-final designs are often referred to as 90 or 95% design submittals for administrative purposes, the draft-final design is expected to be 100% complete subject only to the satisfactory incorporation of review comments by the Government. Incomplete documents are not acceptable.

DESIGN REVIEW ADDRESSES AND DISTRIBUTION ARE AS FOLLOWS:

Review Addresses	Submittal Nos. 1 & 2 ^{1/}
Commander U.S Army Corps of Engineers ATTN: CENWS-PM-EM (Mr. William Goss) P.O. Box C-3755 4735 East Marginal Way Seattle, WA 98124-2255	3 sets 1/2-size drawings 3 sets specs
U.S. Army Corps of Engineers Northwest Area Office (CENWS-EC-CO-TR) ATTN: Mr. Doug Ramsey P.O. Box 92146 Tillicum, WA 98492-0146	+ 4 sets 1/2-size drawings + 4 sets specs
U.S. Army Corps of Engineers, Seattle District ATTN: CENWS-EC-CO-TR (Mr. John Zabukovec) P.O. Box 3755 Seattle, WA 98124-3755	1 set 1/2-size drawings 1 set specs
U.S. Army Corps of Engineers of Engineers Howard A Hanson Dam Project Office 30525 SE MUD MTN ROAD ENUMCLAW, WA 98022-8010 ATTN: Mr. Bill Thibadeau	2 sets 1/2-size drawings 2 sets specs

1/ Submittal Items for Submittal No. 2 will be the same as for Submittal No. 1, except include 4 sets of the annotated Dr Checks review comments with the Design Analysis.

- (2) Government review does not constitute approval or acceptance of any variations from the RFP or from the Contractor's proposal unless such variations have been specifically pointed out by the Contractor in writing and authorized in writing by the Government. The responsibility for a total design in accordance with the contract will remain with the Contractor and any interim NOTICE TO PROCEED with construction will in no way mitigate against that responsibility.
- (3) The Contractor is required to respond to all review comments within 7 days of receipt and submit the annotated comments in the subsequent revised design submittal. All comments must be accepted and incorporated into the design or rebutted to the Government's written satisfaction.

1.2.3 Design Review Conferences

Approximately 2 weeks after submission of design material for Government review, an on-site design review conference may be convened by the Government and held between the Government and the Contractor to discuss the submission and the Government's review comments. (See paragraph 1.2.2 Design Reviews.)

1.2.4 Managing Review Comments

The Government will utilize the DrChecks web based software system for entering review comments. Following the Government review period, the Contractor shall respond to Government comments using DrChecks. The Contractor shall utilize Corps of Engineers DrChecks software for annotating and managing review comments. DrChecks is a Web-based system accessible via the Internet through the Corps of Engineers Seattle District home page. Access the COE site at <http://www.nws.usace.army.mil/> and click the "DrChecks" button. Minimum platform requirements for using DrChecks are a Pentium PC with Windows 95 (or above), Microsoft Internet Explorer 4.0 (or above) or Netscape Navigator (or above), and the capability to send Internet email. The Contractor shall provide this software platform for its staff requiring access to annotate or manage comments.

1.2.5 Project Design Documents

As required by the SUBMITTALS table in this section, the Contractor shall provide Submittal No. 2 for Government Back Check approval. If the Government Back Check requires a Contractor resubmittal of any corrected or revised design, the Contractor will be required to resubmit the revised design data for another Government back check. After the Back Check submittal or resubmittal has been accepted, the Contractor shall submit signed and sealed drawings (stamped FOR CONSTRUCTION). These drawings and specifications will be the approved construction set for the appropriate portion of the work. The Government will issue limited or full notice to proceed with construction as appropriate for the design approved. Tentative distribution of these documents will be 2 copies of 1/2 size drawings and 2 copies of specifications to the review addressees listed on the previous table.

1.3 PHASE II – (CONSTRUCTION) REQUIREMENTS

After the Contractor has completed the applicable project design documents (see Phase 1 - Requirements above) the Government will issue to the Contractor a notice to proceed with construction.

1.3.1 Pre-Construction Conference

Prior to commencement of construction a Pre-Construction Conference will be held to acquaint the Contractor with the general plan of contract administration and requirements under which the construction operation is to proceed. This conference will also inform the Contractor of the obligations concerning equal opportunity and Federal wage rates reporting system.

a. CONTRACTOR shall be prepared to discuss the following subjects, as a minimum:

1. Phasing of Work.
2. Required schedules, including progress schedule and schedule of values.
3. Sequencing of critical path work items.
4. Project changes and clarification procedures.

5. Use of site, access, office, and storage areas, security and temporary facilities.
6. Major priorities.
7. Interface and coordination with existing activities.
8. CONTRACTOR's safety plan and representative.
9. Progress payment procedures.

b. The Pre-Construction Conference will be held at the project site. The Contractor will be given at least 72 hours advance notice of the specific date and time of the conference by the Contracting Officer.

1.3.2 Contract Closeout

Completion, acceptance, and contract settlement are accomplished when final punch list items (see Section 00700 – Contract Clause Inspection of Construction) have been completed and approved, "as-built" drawings and O & M manuals are complete and delivered, and warranty provisions and dates are established.

2.0 PREPARATION OF PHASE I PROJECT DESIGN DOCUMENTS

2.1 General

The Phase I project design documents shall include construction drawings, specifications, and design analysis for categories such as, but not limited to, demolition; civil including miscellaneous sitework such as clearing limits, grading, paving replacement; and electrical.

Specifications shall fully describe and demonstrate the quality of materials, the installation, and performance of equipment, and the quality of workmanship. (see paragraph 2.4) Provide a design analysis for each discipline of work with sufficient backup data including the necessary calculations, tables, methods, and sources used in determining equipment and material sizes and capacities. Design development shall conform to the criteria and requirements of Section 00820 – Statement of Work.

2.2 Designer of Record

2.2.1 Designer Approval

Designer of Record ("DOR") approval is required for design/consulting services furnished under this contract for the accepted proposal, and the completed design including extension of design, critical materials, and deviations from requirements, equipment whose compatibility with the entire system must be checked, and other items as designated by the Contracting Officer's Representative. The Contractor shall identify a DOR for each area of design. The DOR shall also be the final approval authority for shop drawings and any other tests and submittals affecting the final design. Each DOR shall be responsible for the responses to "Requests for Information" ("RFI's"), applicable to their area of design responsibility. The DOR shall sign-off on all applicable RFI responses.

2.2.2 Registration Of Designers

For all design/consulting services furnishing engineering and that of all associated consultants as appropriate (i.e. civil, mechanical, and electrical engineer or other engineering features of the work) the design shall be accomplished or reviewed and approved by engineers currently registered to practice in the particular professional field involved in a state or possession of the United States. All drawings and design calculations of the Contractor and any changes to these documents shall be affixed with the registration stamp (seal) of the Engineer and that of all consultants, before submittal for review. Approval shall be indicated on all documents by having the professional stamp/seal of engineer with personal signature over same appearing on all sheets as applicable to their specialties.

2.3 Construction Drawings

Prepare all drawings on Computer-Aided Design and Drafting (CADD) so that they are well-arranged and placed for ready reference and so that they present complete information. The Contractor shall prepare the drawings with the expectation that the Corps of Engineers, in the role of supervision, will be able to construct the facility without any additional assistance from the Contractor. Drawings shall be complete. Do not show standard details not applicable to the project, and minimize unnecessary wasted space. Do not include details of standard products or items that are adequately covered by specifications on the drawings. Detail the drawings such that conformance with the RFP can be checked and to the extent that shop drawings can be checked. Do not use shop drawings as design drawings. The design documents shall consist of drawings on "D" size sheets. The Contractor shall use standard Corps of Engineers title blocks and borders on all drawings. Submit an index of drawings with each submittal.

2.3.1 CADD Format

It is required that MicroStation electronic file format be utilized by the Contractor in preparing construction drawings and the electronic file format and layering be as specified in Section 01702, As-Built Record Drawings. The project title is "Electrical Power Line Upgrade, Howard Hanson Dam, Green River, Washington." The project drawing file number is E-56-41-24.

Individual drawing plates are to be identified as follows:

Title/Location/Index:	G-1
Civil:	C-1 and Following
Electrical:	E-1 and Following

2.3.2 Drawing Content

Construction drawings shall include all details necessary to portray the design requirements. All construction drawings shall be signed by the responsible registered professional engineer. The following Minimum Drawings (submittals are not limited to these minimums) shall be submitted:

- a. Site plan(s) which accurately show existing and proposed final alignment of power distribution system, finish grade contours and drainage affected, if applicable, layout of major utility lines, demolition plans showing overall impacts to existing site features such as trees, vegetation, utilities, including features to be retained or removed, and all related new construction, and project boundaries.
- b. Access routes and traffic management plan.

- c. Electrical, Exterior: The drawings shall include all exterior distribution transformers, primary electrical service, communication, underground electrical ducts, manholes, and details of all new construction.
- d. Typical details ($3/4'' = 1'-0''$ scale or larger) for each item of equipment, assembly and general and special features of construction. Include all typical conditions.
- e. Equipment schedules and installation details ($1/2'' = 1'-0''$ scale or larger) for each special detail.

2.4 Specifications

For the preparation of construction specifications the Contractor shall utilize the guidance provided in Section 00820 – Statement of Work, and the following: Contractor is to provide specifications covering all work for Divisions 2 through 16. All specifications shall be UFGS (a) where noted, and prepared and submitted in CSI three-part format. The specifications shall require furnishing additional information such as shop or working drawings, manufacturer's literature, certificates of compliance, material samples, and guarantees necessary to assure that the work can be completed and conforms with the criteria contained in the contract and that supervision and inspection of the project can be maintained. The Division 1 Specifications (see Table of Contents – Technical Specifications) have been prepared by the Government but require the following input from the Contractor:

- a. Section 01330 – Submittal Procedures. Prepare the submittal register ENG Form 4288. See specification Section 01330 for guidance and sample blank form. The submittal register shall be prepared on an RMS compatible form in Microsoft Excel, and both hard copy and electronic file shall be furnished with the contract documents.
- b. Miscellaneous requested changes or proposed revisions shall be annotated by the designer in redline /strikeout format and submitted with the review documents

2.5 Design Analysis

Design analysis includes complete design narrative and backup calculations to support each discipline of work. The Contractor shall utilize the guidance provided in Section 00820 – Statement of Work, and the following. These analysis shall include but not be limited to civil, structural, and electrical systems. Provide a complete discussion of Life Safety and Fire Protection issues. Include computations for sizing equipment. Provide short circuit, load flow, and any necessary coordination studies. Design analyses shall be presented in a clear and legible form incorporating a title page, and a table of contents. Sources of information, formula, and references shall be explained. Assumptions and conclusions shall be explained and cross-referencing is to be clear. Design analysis shall be accomplished by Registered Professional Engineers qualified in the respective design field (see paragraph 2.2 Designer of Record).

- a. When a computer program is used, the program shall be named and described. This description must be sufficient to verify the validity of methods, assumptions, theories, and formulas.
- b. Spreadsheet style programs are acceptable for structural analysis and design. Under a repetitive condition, at least one manual computation must be performed for each unique condition. All data, formulas, and any referenced items should be clearly shown before initiation of the program. Any computer models generated for use with modeling programs should be accompanied by drawings indicating coordinate system, joint numbering and element/member

numbering scheme. Maximum stresses used to design a member that are printed out in summaries of computer programs shall be circled, checked, or highlighted to accelerate reviews.

2.6 Additional Requirements

- a. Equipment and Fixtures. The Contractor shall furnish equipment and fixture schedules, catalog data, applicable Government or Commercial Specification numbers, and indicate sizes, capacities, manufacturer, model numbers, and manufacturer's warranties for all equipment and fixtures. Originals of catalog data shall be submitted in lieu of reproduces or copies to ensure legible data (Note – high quality copies that are clear and totally legible may be provided in lieu of originals after providing originals with the first two sets provided for any one individual addressee).
- b. Any additional surveys and information obtained by the Contractor shall be submitted for review with the other design data.

3.0 PHASE I DESIGN SUBMITTAL MATERIAL REQUIREMENTS

3.1 General

Design reviews will be conducted by the Government for 95 percent submittals. Design submittal schedule and distribution requirements are given in paragraph 1.2 PHASE I - REQUIREMENTS. Requirements for preparation of submittal materials are found in paragraph 2. PREPARATION OF PHASE I PROJECT DESIGN DOCUMENTS. Submittal materials required for these design reviews are as follows.

3.2 95 Percent Submittal

- a. Construction Drawings: All drawings to 95/100 percent completion. (100% complete subject to Government review comments.)
- b. Specifications: All specifications to 95/100 percent completion. (100% complete subject to Government review comments.)
- c. Design Analysis and Supporting Data:
 1. Design analysis with supporting calculations and other data as appropriate to support the completed work.
 2. Equipment and Fixture Schedules catalog data and manufacturer's warranties for all equipment and fixtures.

3.3 Revised Final Submittals

Submit revised documents and annotated Government review comments from previous submittal. All comments shall be incorporated into the design or rebutted to the satisfaction of the CO.

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END OF SECTION

SECTION 00820

STATEMENT OF WORK

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SECTION 00820

STATEMENT OF WORK

1.0 PROJECT DESCRIPTION

The objective of this solicitation is to upgrade the electrical distribution system supplying power to Howard Hanson Dam (HHD) located on the Green River near Palmer, WA. This renovation is part of an overall upgrade for the Howard Hanson Additional Water Storage (HHAWS) Project. It shall consist of the removal of the existing four (4) miles of government owned overhead distribution system and the installation of a new overhead distribution system capable of supplying power for the increased electrical loads resulting from the HHAWS Project. The overhead distribution system shall be designed and constructed to provide a reliable, low maintenance, cost effective system to provide system integrity during the environmental extremes of the area. This shall include the possibility of ice build up, severe wind gusts, and tree branches falling across the line.

In addition, this project shall (1) remove the three existing 25kVA transformers at the Administration Building and provide a new pad mounted transformer, rated 75kVA at 12470V delta primary with 208/120V wye secondary, properly connected to a 12470V grounded wye distribution system, and connect the existing Administration Building's service entrance to the new transformer; (2) route new underground primary distribution cables and conduit across the dam to the left bank from the primary terminal riser pole; (3) provide a new pad mounted transformer, rated 500kVA at 12470V delta primary with 480/277V wye secondary, properly connected to a 12470V grounded wye distribution system, to serve the existing Maintenance Building and a new Administration Building (to be built by others under a separate contract); and (4) provide a 500kW standby generator with automatic transfer switch and all appurtenances for complete operation.

1.01 Site Area.

The site is described on the RFP drawings included as part of this solicitation.

1.02 Scope of Work.

The scope of work includes all design and construction of the features described in the RFP, including but not limited to, site inspection and planning, clearing, grading, environment protection, electrical power distribution systems, pavements and site restoration.

1.03 Demolition Considerations and Requirements.

To provide continuous power to HHD, the existing line shall remain energized during construction. Removal of the existing overhead line shall occur after the new line has started to supply power to the dam. The Contractor is advised that this project and the dam are subject to Federal, State, and local regulatory agency inspections to review compliance with environmental laws and regulations. Off-site disposal of construction debris without State permits and/or not in accordance with regulatory requirements will require the Contractor at his own expense to remove, transport and relocate the debris to a State approved site. The Contractor will also be required to pay any fines, penalties, or fees related to the illegal disposal of construction debris.

1.04 Location and Access Requirements.

The project is within the Green River Watershed and is subject to special access controls and work requirements as defined in the RFP documents. (See Division 1 specifications)

2.0 EXISTING CONDITIONS

The existing distribution system supplies a 75kVA load via a 3-phase, 3 wire, 12kV #6 copper overhead line. The overhead line makes a 6 mile run from the Puget Sound Energy (PSE) substation through a rural environment to the Howard Hanson Dam Administration Building. The PSE metering terminal is located at the 2 mile point on the line, which is near the Tacoma Water Department Headworks. The remaining 4 miles of overhead line, from the metering terminal to HHD, belong to the U.S. Army Corps of Engineers. The distribution system includes a load break knife switch mounted on the next pole after the meter, and on the pole at mile point 3.5, there is a 25kVA pole mounted transformer that supplies the tailwater gauge. The pole line also supports communications cables that belong to Qwest Communications. The existing overhead line crosses over the road and river multiple times. Since the line goes through a wooded area, reliability of the existing system has become an issue due to outages caused by tree limbs falling across the line.

2.01 Field Information.

The utility and survey information provided in the drawings is for information only, and not intended to be all-inclusive. It is provided to assist the Contractor during the design of this project. The Contractor is responsible for field verifying all information given. The Contractor is also responsible for obtaining all information necessary to properly design and install all work. Gathering information during design shall be coordinated through the Contracting Officer. Any survey required to provide utility locations, manhole inverts, verification of existing features, etc., shall be the responsibility of the Contractor and shall tie into the project datum. The Contractor is responsible for coordination with Puget Sound Energy (PSE), Tacoma Public Utilities (TPU), Burlington Northern & Santa Fe Railroad (BNSF), Qwest Communications, and all other utility companies for information and/or approvals.

When work is to occur on any pole facilities that include communication lines the Contractor shall notify the owning utility at least 72 hours in advance of the time the Contractor desires the proposed work to occur. The point of contact for PSE is Gerald (Jerry) Laster, P.E. at 425-462-3869 and for Qwest, Nancy Rayl at 253-872-3113 (3050).

3.0 DESCRIPTION OF PROPOSED CONSTRUCTION

The upgraded overhead distribution line shall be capable of supplying 3-phase power on a 4-wire system to a 1,000kVA load at 12470V with a voltage drop of less than 2.0 percent. The line shall run from the PSE metering pole to Howard Hanson Dam a distance of approximately 4 miles. The project shall also include construction of underground service to existing facilities and provisions for connections to future facilities.

Equipment and devices shall be installed and energized in accordance with the manufacturer's published instructions. The installation shall comply with the requirements and recommendations of the NESC for medium loading districts, Grade B construction. No reduction in clearance shall be made. The installation shall also comply with the applicable parts of NFPA 70.

The aerial system shall consist of wood poles, conductors, a pole mounted recloser, a pole mounted gang-operated load break switch, and a pole mounted transformer. Unless otherwise indicated, conductors shall be installed in accordance with manufacturer's approved tables of sags and tensions. Proper care shall be taken in handling and stringing conductors to avoid abrasions, sharp bends, cuts, kinks, or any possibility of damage to insulation or conductors. Initial sag and tension shall be checked by the Contractor, after installation and within an elapsed time recommended by the manufacturer. The aerial conductors shall be a covered tree wire for the prevention of temporary faults and for raptor protection. Climbing space on the structure shall be in compliance with NESC. Where the lines pass through trees, trees shall be trimmed at least 15 feet clear on both sides horizontally and below for medium-voltage lines, and no branch shall overhang horizontal clearances. Where necessary, trees shall be removed to provide a clear right-of-way.

A primary terminal riser pole shall be provided at the existing Administration Building for the transition of the aerial system to an underground system. From the pole, primary conductors shall be routed underground to a contractor furnished pad-mounted junction box (cable terminating cabinet). The line shall enter the source side of the junction box and exit the load side underground. The load side shall consist of three 200A load-break taps. From one 200A tap, conductors shall be routed underground to supply the new 75kVA pad mounted transformer at the existing administrative building. From the second tap conductors shall be routed underground to supply power to a contractor furnished 500kVA transformer, located on the left bank of the dam. The third tap shall be reserved for future expansion to the new intake structure. Medium voltage cables shall be routed underground in a concrete encased ductbank. To cross the project site, the existing manhole and ductbank system shall be extended to the riser pole, new ducts shall be routed under the roadway bridge and along the face of the spillway, and a new underground ductbank shall be provided on the left bank. The new underground ductbank shall

be routed to the new 500kVA pad mounted transformer and generator. The 500kVA 12470V-to-480/277V transformer to be furnished and installed under this contract, shall supply power to the existing maintenance building and the new administrative building, to be provided under a separate contract.

A telephone line owned and operated by QWest is collocated with the existing overhead electrical line. The Contractor shall relocate the QWest lines to the new poles wherever they share a common pole with the electrical line. If the QWest line is on a pole independent of the existing electrical line the QWest line shall remain in place on the existing pole if possible. The Contractor shall NOT be responsible for removal of existing poles, which are servicing QWest lines only. The Contractor shall temporarily secure the phone line by a rope tie-off to the pole. QWest will make the permanent attachment. A minimum of 48 -hour advance notification (see Paragraph 2.0 for QWest POC) shall be made with QWest prior to relocating corner poles of the phone lines. A corner pole is defined as deviating greater than 3-4 degrees from a straight line. The existing poles can be differentiated as either a corner pole or in-line pole by the type of J hook. All QWest lines relocated by the Contractor shall maintain a minimum of 20-foot clearance from the ground surface at road crossings.

4.0 DESIGN CRITERIA

Referenced codes and standards are minimum acceptable criteria. Administrative, contractual, and procedural features of the contract shall be as described in other sections of the RFP.

IEEE/ANSI C2 2002 NATIONAL ELECTRIC SAFETY CODE (NESC)

NFPA 70 2002 NATIONAL ELECTRICAL CODE (NEC)

5.0 DESIGN REQUIREMENTS

5.01 General Design Considerations

The design, materials, equipment and installation shall be in accordance with the requirements of the listed codes and design manuals, with the requirements of this section, and with the listed Specifications.

- (1) This project shall be 100% asbestos free. No asbestos or asbestos containing materials, in any amounts shall be allowed in the construction of this project.
- (2) There shall be zero lead content in any paints or coatings used in the construction of this project.
- (3) The alignment of the new overhead distribution line shall follow the alignment of the existing overhead distribution system as close as possible. No lands outside the construction Right of Way shall be disturbed by the construction activity. The design shall minimize the

amount of disturbance to existing lands required by construction within the designated Right of Way.

(4) The design and installation of the distribution system shall comply with the requirements of the National Electric Safety Code (NESC), National Electrical Code (NFPA), local utility requirements, accepted good practice, and all other governing regulations. The Government may permit variance from these rules, if not contrary to law, for good cause shown if it finds compliance is impossible, impractical, or unreasonable.

(4.1) Aerial Distribution System

A. Line requirements shall meet or exceed the requirements of the NESC Grade B construction as identified in NESC Section 25 "Loadings for Grades B and C." These requirements shall be used to establish the proper loading for vertical, horizontal, and transverse forces on the conductor and line supports along with the proper overload factors. These requirements are outlined in NESC Rules 250, 251, 252, and 253.

B. Structures shall be designed to withstand the appropriate loads, with appropriate safety factors included, as specified in NESC Rule 261. Where the use of guying and bracing becomes necessary; design and installation shall comply with NESC Rule 264.

C. The vertical clearances of wires shall adhere to NESC Rule 232 as a road, street or other area subject to truck traffic, unless a more stringent condition applies.

D. The horizontal clearances between conductors shall adhere to NESC Rule 235.

E. The line shall be designed and constructed to minimize adverse effects resulting from wind produced conductor vibration.

(4.2) Underground Distribution System

A. The contractor shall design all details necessary to connect the underground conduits and conductors to the existing administrative building and maintenance building.

B. The underground system shall consist of conductors, ductbanks, pad mounted junction boxes (cable terminating cabinets), manholes/vaults, pad mounted transformers, generator, and automatic transfer switch. The design shall comply with applicable sections of the NESC and shall meet the requirements shown on the RFP drawings.

5.01.1 Specifications

The Contractor shall provide a design and construction package using the guide specifications provided or referenced in this RFP. See Attachment 1 at the end of this section for additional information concerning development of specifications. Section 00890 lists the proposed technical specifications required for the project and includes any prescriptive design requirements for a particular specification section, if applicable. If any additional specifications are required, the Contractor shall identify the need in writing to the Contracting Officer. The Contractor shall provide specifications for any items not identified in the Corps' guide

specifications. The Contractor shall edit the guide specifications, but edits shall conform to the specific minimum standard requirements of this RFP and are subject to approval by the Government.

A. Attached Specifications

The Table of Contents-Technical Specifications lists all of the specifications attached to these documents in full text in their entirety. The attached Section 00800 - Special Contract Requirements and Division 1 specifications shall be included as written in each design submittal and the construction set of specifications.

5.01.2 Drawings And Data

A. RFP Preliminary Drawings

Attached to this RFP is a set of the preliminary design drawings including site location map, site plans and partially completed design details that were developed based on the design criteria for this project. See Attachment A at the end of Section 00800 for a list of the RFP drawings. The RFP drawings shall be the basis for the final construction contract drawings and shall be revised and supplemented as required to complete the design. RFP drawings will be provided in Microstation Version J CADD format.

B. Design Analysis

Design analysis and calculations shall be prepared by a licensed professional engineer with experience in the design and construction of overhead and underground electrical distribution systems. In addition to the Power Coordination Study and Staking Guide, include a narrative to justify standards and methods used in the design.

(1) Power Coordination Study

A coordinated power systems study shall be performed to determine settings of adjustable protective devices and ratings of associated power fuses. A Registered Professional Engineer with demonstrated experience in power system coordination in the last three years shall do the studies. It shall be assumed that the load will include large motors in excess of 50 hp.

- Analyses shall be prepared to demonstrate that the equipment selected and systems constructed meet the contract requirements for equipment ratings, coordination, and protection.
- The report shall include a narrative describing: the analyses performed; the bases and methods used; and the desired method of coordinated protection of the power system.

- The study shall include descriptive and technical data for existing devices and new protective devices proposed. The data shall include manufacturers published data, nameplate data, and definition of the fixed or adjustable features of the existing or new protective devices.
- The report shall document utility company data including system voltages, fault MVA, system X/R ratio, time-current characteristics curves, current transformer ratios, and relay device numbers and settings; and existing power system data including time-current characteristics curves and protective device ratings and settings.
- The report shall contain fully coordinated composite time-current characteristic curves for each bus in the system, as required to ensure coordinated power system between protective devices or equipment. The report shall include recommended ratings and settings of all protective devices in tabulated form.
- The report shall provide the calculation performed for the analyses, including computer analysis programs utilized. The name of the software package, developer, and version number shall be provided.

(2) Staking Design Guide

A staking design guide shall be provided to the government before staking begins and shall include values and calculations and where applicable the appropriate mathematical models showing compliance with the NESC, other local governing regulations, and accepted good practice. These calculations, values, and models shall include but not be limited to the following values:

- Size, type, and total length of conductor used showing voltage drop for the run.
- Vertical clearances of conductors at maximum sag under the range of local conditions. This shall be indicated in a staking table or other preferred method with all design ruling spans used for the proper pole heights, span, and conductor.
- Horizontal clearance of conductors supported from the same structure.
- Maximum vertical loads applied to the pole from the conductors with ice, crossarms, insulators and other equipment mounted on the poles.
- Longitudinal/Horizontal loads. This shall be indicated on the sag and tension tables showing the tensions applied to the pole due to the span and sag of the line. The range of span lengths for this table shall be, as a minimum, from the shortest to the longest span practical and the range of temperatures shall be from the lowest to the highest temperatures the conductor will be strung and sagged.

- Transverse loading the system is subject to under local conditions.
- Conductor uplift. It shall be shown that conductor uplift has been prevented in all locations where the problem may arise.
- Maximum vibration as a result of wind produced conductor vibration.
- Strength requirements. It shall be shown that the poles, supports, and insulators will be able to withstand the vertical, horizontal, and transverse loadings at given line angles. Where the pole cannot support these loads, it shall be shown that guying or bracing is sufficient to bear them. This may be shown with pole strength tables, pin strength tables, guying guides or other preferred methods.

C. Final Construction Drawings

The final construction drawings shall include all details required to properly define the work and shall be provided in accordance with recognized industry practice for facilities of the type being provided and in accordance with requirements of this RFP.

The detail drawings shall consist of equipment drawings, illustrations, schedules, instructions, diagrams and other information necessary to define the installation and enable the Government to check conformity with the requirements of the RFP including poles, crossarms, conductors, insulators, switches, reclosers, transformers, and generator. This shall also include detail drawings showing physical arrangement, construction details, connections, finishes, materials used in fabrication. Drawings shall be drawn to scale and/or dimensioned. Drawings shall be submitted in Microstation Version J CADD format.

5.02 Other Work in the Area.

The contractor shall coordinate with other projects and work in the area including work being done by entities other than the Corps of Engineers. Coordination shall be in conjunction with the Contracting Officer.

5.03 Permits

The Contractor is responsible for obtaining all required permits from all public and private entities, which have jurisdiction over the project including: construction within city, state, and county street and road rights - of-way; construction within railroad rights -of-way; crossings by plant or utility lines of city, county, and state roads and streets.

Attachment 1 Follows

SECTION 01320
PROJECT SCHEDULE

PART 1 GENERAL

1.1 REFERENCES

The publications listed below form a part of the specification to the extent referenced. The publications are referenced in the text by basic designation only.

U.S. ARMY CORPS OF ENGINEERS (USACE)

ER 1-1-11(1995) Progress, Schedules, and Network Analysis Systems

1.2 QUALIFICATIONS

The Contractor shall designate an authorized representative who shall be responsible for the preparation of all required project schedule reports.

PART 2 PRODUCTS (Not Applicable)

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

Pursuant to the Contract Clause, SCHEDULE FOR CONSTRUCTION CONTRACTS, a Project Schedule as described below shall be prepared. The Contractor shall be responsible for scheduling of all design, procurement and construction activities. Contractor management personnel shall actively participate in its development. Subcontractors and suppliers working on the project shall also contribute in developing and maintaining an accurate Project Schedule. The approved Project Schedule shall be used to measure the progress of the work, to aid in evaluating time extensions, and to provide the basis of all progress payments.

3.2 BASIS FOR PAYMENT

The schedule shall be the basis for measuring Contractor progress. Lack of an approved schedule or scheduling personnel will result in an inability of the Contracting Officer to evaluate Contractor's progress for the purposes of payment. Failure of the Contractor to provide all information, as specified below, shall result in the disapproval of the entire Project Schedule submission and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. In the case where Project Schedule revisions have been directed by the Contracting Officer and those revisions have not been included in the Project Schedule, the Contracting Officer may hold retainage up to the maximum allowed by contract, each payment period, until revisions to the Project Schedule have been made.

3.3 PROJECT SCHEDULE

The computer software system utilized by the Contractor to produce the Project Schedule shall be capable of providing all requirements of this specification. Failure of the Contractor to meet the requirements of this specification shall result in the disapproval of the schedule. Manual methods used to produce any required information shall require approval by the Contracting Officer.

3.3.1 Use of the Critical Path Method

The Critical Path Method (CPM) of network calculation shall be used to generate the Project Schedule. The Contractor shall provide the Project Schedule in the Precedence Diagram Method (PDM).

3.3.2 Level of Detail Required

The Project Schedule shall include an appropriate level of detail. Failure to develop or update the Project Schedule or provide data to the Contracting Officer at the appropriate level of detail, as specified by the Contracting Officer, shall result in the disapproval of the schedule. The Contracting Officer will use, but is not limited to, the following conditions to determine the appropriate level of detail to be used in the Project Schedule:

3.3.2.1 Activity Durations

Contractor submissions shall follow the direction of the Contracting Officer regarding reasonable activity durations. Reasonable durations are those that allow the progress of activities to be accurately determined between payment periods (usually less than 2 percent of all non-procurement activities' Original Durations are greater than 20 days).

3.3.2.2 Design and Permit Activities

Design and permitting activities, including necessary conferences and follow-up actions and design package submission dates, shall be integrated into the schedule.

3.3.2.3 Procurement Activities

Tasks related to the procurement of long lead materials or equipment shall be included as separate activities in the project schedule. Long lead materials and equipment are those materials that have a procurement cycle of over 90 days. Examples of procurement process activities include, but are not limited to: submittals, approvals, procurement, fabrication, and delivery.

3.3.2.4 Government Activities

Government and other agency activities that could impact progress shall be shown. These activities include, but are not limited to: approvals, design reviews, environmental permit approvals by State regulators, inspections, utility tie-in, Government Furnished Equipment (GFE) and Notice to Proceed (NTP) for phasing requirements.

3.3.2.5 Responsibility

All activities shall be identified in the project schedule by the party responsible to perform the work. Responsibility includes, but is not limited to, the subcontracting firm, contractor work force, or government agency performing a given task. Activities shall not belong to more than one responsible party. The responsible party for each activity shall be identified by the Responsibility Code.

3.3.2.6 Work Areas

All activities shall be identified in the project schedule by the work area in which the activity occurs. Activities shall not be allowed to cover more than one work area. The work area of each activity shall be identified by the Work Area Code.

3.3.2.7 Modification or Claim Number

Any activity that is added or changed by contract modification or used to justify claimed time shall be identified by a mod or claim code that changed the activity. Activities shall not belong to more than one modification or claim item. The modification or claim number of each activity shall be identified by the Mod or Claim Number. Whenever possible, changes shall be added to the schedule by adding new activities. Existing activities shall not normally be changed to reflect modifications.

3.3.2.8 Bid Item

All activities shall be identified in the project schedule by the Bid Item to which the activity belongs. An activity shall not contain work in more than one bid item. The bid item for each appropriate activity shall be identified by the Bid Item Code.

3.3.2.9 Phase of Work

All activities shall be identified in the project schedule by the phases of work in which the activity occurs. Activities shall not contain work in more than one phase of work. The project phase of each activity shall be by the unique Phase of Work Code.

3.3.2.10 Category of Work

All Activities shall be identified in the project schedule according to the category of work which best describes the activity. Category of work refers, but is not limited, to the procurement chain of activities including such items as permits, submittals, approvals, procurement, fabrication, delivery, installation, start-up, and testing. The category of work for each activity shall be identified by the Category of Work Code.

3.3.2.11 Feature of Work

All activities shall be identified in the project schedule according to the feature of work to which the activity belongs. Feature of work refers, but is not limited to, a work breakdown structure for the project. The feature of work for each activity shall be identified by the Feature of Work Code.

3.3.2.12 Critical Activities

The following activities shall be listed as separate line activities on the Contractor's project schedule:

- a. Submission and approval of mechanical/electrical layout drawings.
- b. Submission and approval of O & M manuals.
- c. Submission and approval of as-built drawings.
- d. Submission and approval of 1354 data and installed equipment lists.
- e. Submission and approval of fire protection specialist.
- f. Controls testing plan.
- g. Controls testing.
- h. Performance Verification testing.
- i. Other systems testing, if required.
- j. Prefinal inspection.
- k. Correction of punchlist from prefinal inspection.
- l. Final inspection.

3.3.3 Scheduled Project Completion

The schedule interval shall extend from NTP to the contract completion date.

3.3.3.1 Project Start Date

The schedule shall start no earlier than the date on which the NTP was acknowledged. The Contractor shall include as the first activity in the project schedule an activity called "Start Project". The "Start Project" activity shall have an "ES" constraint date equal to the date that the NTP was acknowledged, and a zero day duration.

3.3.3.2 Constraint of Last Activity

Completion of the last activity in the schedule shall be constrained by the contract completion date. Calculation on project updates shall be such that if the early finish of the last activity falls after the contract completion date, then the float calculation shall reflect a negative float on the critical path. The Contractor shall include as the last activity in the project schedule an activity called "End Project". The "End Project" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.3.3 Early Project Completion

In the event the project schedule shows completion of the project prior to the contract completion date, the Contractor shall identify those activities that have been accelerated and/or those activities that are scheduled in parallel to support the Contractor's "early" completion. Contractor shall specifically address each of the activities noted in the narrative report at every project schedule update period to assist the Contracting Officer in evaluating the Contractor's ability to actually complete prior to the contract period.

3.3.4 Interim Completion Dates

Contractually specified interim completion dates shall also be constrained to show negative float if the early finish date of the last activity in that phase falls after the interim completion date.

3.3.4.1 Start Phase

The Contractor shall include as the first activity for a project phase an activity called "Start Phase X" where "X" refers to the phase of work. The "Start Phase X" activity shall have an "ES" constraint date equal to the date on which the NTP was acknowledged, and a zero day duration.

3.3.4.2 End Phase

The Contractor shall include as the last activity in a project phase an activity called "End Phase X" where "X" refers to the phase of work. The "End Phase X" activity shall have an "LF" constraint date equal to the completion date for the project, and a zero day duration.

3.3.4.3 Phase X

The Contractor shall include a hammock type activity for each project phase called "Phase X" where "X" refers to the phase of work. The "Phase X" activity shall be logically tied to the earliest and latest activities in the phase.

3.3.5 Default Progress Data Disallowed

Actual Start and Finish dates shall not be automatically updated by default mechanisms that may be included in CPM scheduling software systems. Actual Start and Finish dates on the CPM schedule shall match those dates provided from Contractor Quality Control Reports. Failure of the Contractor to document the Actual Start and Finish dates on the Daily Quality Control report for every in-progress or completed activity, and failure to ensure that the data contained on the Daily Quality Control reports is the sole basis for schedule updating shall result in the disapproval of the Contractor's schedule and the inability of the Contracting Officer to evaluate Contractor progress for payment purposes. Updating of the percent complete and the remaining duration of any activity shall be independent functions. Program features which calculate one of these parameters from the other shall be disabled.

3.3.6 Out-of-Sequence Progress

Activities that have posted progress without all preceding logic being satisfied (Out-of-Sequence Progress) will be allowed only on a case-by-case approval of the Contracting Officer. The Contractor shall propose logic corrections to eliminate all out of sequence progress or justify not changing the sequencing for approval prior to submitting an updated project schedule.

3.3.7 Negative Lags

Lag durations contained in the project schedule shall not have a negative value.

3.4 PROJECT SCHEDULE SUBMISSIONS

The Contractor shall provide the submissions as described below. The data disk, reports, and network diagrams required for each submission are contained in paragraph SUBMISSION REQUIREMENTS.

3.4.1 Preliminary Project Schedule Submission

The Preliminary Project Schedule, defining the Contractor's planned operations for the first 60 calendar days shall be submitted for approval within 20 calendar days after the NTP is acknowledged. The approved preliminary schedule shall be used for payment purposes not to exceed 60 calendar days after NTP.

3.4.2 Initial Project Schedule Submission

The Initial Project Schedule shall be submitted for approval within 40 calendar days after NTP. The schedule shall provide a reasonable sequence of activities which represent work through the entire project and shall be at a reasonable level of detail.

3.4.3 Periodic Schedule Updates

Based on the result of progress meetings, specified in "Periodic Progress Meetings," the Contractor shall submit periodic schedule updates. These submissions shall enable the Contracting Officer to assess Contractor's progress. If the Contractor fails or refuses to furnish the information and project schedule data, which in the judgment of the Contracting Officer or authorized representative is necessary for verifying the Contractor's progress, the Contractor shall be deemed not to have provided an estimate upon which progress payment may be made.

3.4.4 Standard Activity Coding Dictionary

The Contractor shall use the activity coding structure defined in the Standard Data Exchange Format (SDEF) in ER 1-1-11, Appendix A. This exact structure is mandatory, even if some fields are not used.

3.5 SUBMISSION REQUIREMENTS

The following items shall be submitted by the Contractor for the preliminary submission, initial submission, and every periodic project schedule update throughout the life of the project:

3.5.1 Data Disks

Two data disks containing the project schedule shall be provided. Data on the disks shall adhere to the SDEF format specified in ER 1-1-11, Appendix A.

3.5.1.1 File Medium

Required data shall be submitted on 3.5 disks, formatted to hold 1.44 MB of data, ~~under the MS-DOS Version 5.0 or 6.0, unless otherwise approved by the Contracting Officer.~~

3.5.1.2 Disk Label

A permanent exterior label shall be affixed to each disk submitted. The label shall indicate the type of schedule (Preliminary, Initial, Update, or Change), full contract number, project name, project location, data date, name and telephone number or person responsible for the schedule, and the ~~MS-DOS~~ version used to prepare the C.P.M. format the disk.

3.5.1.3 File Name

Each file submitted shall have a name related to either the schedule data date, project name, or contract number. The Contractor shall develop a naming convention that will ensure that the names of the files submitted are unique. The Contractor shall submit the file naming convention to the Contracting Officer for approval.

3.5.2 Narrative Report

A Narrative Report shall be provided with the preliminary, initial, and each update of the project schedule. This report shall be provided as the basis of the Contractor's progress payment request. The Narrative Report shall include: a description of activities along the 2 most critical paths, a description of current and anticipated problem areas or delaying factors and their impact, and an explanation of corrective actions taken or required to be taken. The narrative report is expected to relay to the Government, the Contractor's thorough analysis of the schedule output and its plans to compensate for any problems, either current or potential, which are revealed through that analysis.

3.5.3 Approved Changes Verification

Only project schedule changes that have been previously approved by the Contracting Officer shall be included in the schedule submission. The Narrative Report shall specifically reference, on an activity by activity basis, all changes made since the previous period and relate each change to documented, approved schedule changes.

3.5.4 Schedule Reports

The format for each activity for the schedule reports listed below shall contain: Activity Numbers, Activity Description, Original Duration, Remaining Duration, Early Start Date, Early Finish Date, Late Start Date, Late Finish Date, Total Float. Actual Start and Actual Finish Dates shall be printed for those activities in progress or completed.

3.5.4.1 Activity Report

A list of all activities sorted according to activity number.

3.5.4.2 Logic Report

A list of Preceding and Succeeding activities for every activity in ascending order by activity number. Preceding and succeeding activities shall include all information listed above in paragraph Schedule Reports. A blank line shall be left between each activity grouping.

3.5.4.3 Total Float Report

A list of all incomplete activities sorted in ascending order of total float. Activities which have the same amount of total float shall be listed in ascending order of Early Start Dates. Completed activities shall not be shown on this report.

3.5.4.4 Earnings Report

A compilation of the Contractor's Total Earnings on the project from the NTP until the most recent Monthly Progress Meeting. This report shall reflect the Earnings of specific activities based on the agreements made in the field and approved between the Contractor and Contracting Officer at the most recent Monthly Progress Meeting. Provided that the Contractor has provided a complete schedule update, this report shall serve as the basis of determining Contractor Payment. Activities shall be grouped by bid item and sorted by activity numbers. This report shall: sum all activities in a bid item and provide a bid item percent; and complete and sum all bid items to provide a total project percent complete. The printed report shall contain, for each activity: the Activity Number, Activity Description, Original Budgeted Amount, Total Quantity, Quantity to Date, Percent Complete (based on cost), and Earnings to Date.

3.5.5 Network Diagram

The network diagram shall be required on the initial schedule submission and on monthly schedule update submissions. The network diagram shall depict and display the order and interdependence of activities and the sequence in which the work is to be accomplished. The Contracting Officer will use, but is not limited to, the following conditions to review compliance with this paragraph:

3.5.5.1 Continuous Flow

Diagrams shall show a continuous flow from left to right with no arrows from right to left. The activity number, description, duration, and estimated earned value shall be shown on the diagram.

3.5.5.2 Project Milestone Dates

Dates shall be shown on the diagram for start of project, any contract required interim completion dates, and contract completion dates.

3.5.5.3 Critical Path

The critical path shall be clearly shown.

3.5.5.4 Banding

Activities shall be grouped to assist in the understanding of the activity sequence. Typically, this flow will group activities by category of work, work area and/or responsibility.

3.5.5.5 S-Curves

Earnings curves showing projected early and late earnings and earnings to date.

3.6 PERIODIC PROGRESS MEETINGS

Progress meetings to discuss payment shall include a monthly onsite meeting or other regular intervals mutually agreed to at the preconstruction conference. During this meeting the Contractor shall describe, on an activity by activity basis, all proposed revisions and adjustments to the project schedule required to reflect the current status of the project. The Contracting Officer will approve activity progress, proposed revisions, and adjustments as appropriate.

3.6.1 Meeting Attendance

The Contractor's Project Manager and Scheduler shall attend the regular progress meeting.

3.6.2 Update Submission Following Progress Meeting

A complete update of the project schedule containing all approved progress, revisions, and adjustments, based on the regular progress meeting, shall be submitted not later than 4 working days after the monthly progress meeting.

3.6.3 Progress Meeting Contents

Update information, including Actual Start Dates, Actual Finish Dates, Remaining Durations, and Cost-to-Date shall be subject to the approval of the Contracting Officer. As a minimum, the Contractor shall address the following items on an activity by activity basis during each progress meeting.

3.6.3.1 Start and Finish Dates

The Actual Start and Actual Finish dates for each activity currently in-progress or completed.

3.6.3.2 Time Completion

The estimated Remaining Duration for each activity in-progress. Time-based progress calculations shall be based on Remaining Duration for each activity.

3.6.3.3 Cost Completion

The earnings for each activity started. Payment will be based on earnings for each in-progress or completed activity. Payment for individual activities will not be made for work that contains quality defects. A portion of the overall project amount may be retained based on delays of activities.

3.6.3.4 Logic Changes

All logic changes pertaining to NTP on change orders, change orders to be incorporated into the schedule, contractor proposed changes in work sequence, corrections to schedule logic for out-of-sequence progress, lag durations, and other changes that have been made pursuant to contract provisions shall be specifically identified and discussed.

3.6.3.5 Other Changes

Other changes required due to delays in completion of any activity or group of activities include: 1) delays beyond the Contractor's control, such as strikes and unusual weather. 2) delays encountered due to

submittals, Government Activities, deliveries or work stoppages which make re-planning the work necessary. 3) Changes required to correct a schedule which does not represent the actual or planned prosecution and progress of the work.

3.7 REQUESTS FOR TIME EXTENSIONS

In the event the Contractor requests an extension of the contract completion date, or any interim milestone date, the Contractor shall furnish the following for a determination as to whether or not the Contractor is entitled to an extension of time under the provisions of the contract: justification, project schedule data, and supporting evidence as the Contracting Officer may deem necessary. Submission of proof of delay, based on revised activity logic, duration, and costs (updated to the specific date that the delay occurred) is obligatory to any approvals.

3.7.1 Justification of Delay

The project schedule shall clearly display that the Contractor has used, in full, all the float time available for the work involved with this request. The Contracting Officer's determination as to the number of allowable days of contract extension shall be based upon the project schedule updates in effect for the time period in question, and other factual information. Actual delays that are found to be caused by the Contractor's own actions, which result in the extension of the schedule, will not be a cause for a time extension to the contract completion date.

3.7.2 Submission Requirements

The Contractor shall submit a justification for each request for a change in the contract completion date of under 2 weeks based upon the most recent schedule update at the time of the NTP or constructive direction issued for the change. Such a request shall be in accordance with the requirements of other appropriate Contract Clauses and shall include, as a minimum:

- a. A list of affected activities, with their associated project schedule activity number.
- b. A brief explanation of the causes of the change.
- c. An analysis of the overall impact of the changes proposed.
- d. A sub-network of the affected area.

Activities impacted in each justification for change shall be identified by a unique activity code contained in the required data file.

3.7.3 Additional Submission Requirements

For any requested time extension of over 2 weeks, the Contracting Officer may request an interim update with revised activities for a specific change request. The Contractor shall provide this disk within 4 days of the Contracting Officer's request.

3.8 DIRECTED CHANGES

If the NTP is issued for changes prior to settlement of price and/or time, the Contractor shall submit proposed schedule revisions to the Contracting Officer within 2 weeks of the NTP being issued. The proposed revisions to the schedule will be approved by the Contracting Officer prior to inclusion of those changes within the project schedule. If the Contractor fails to submit the proposed revisions, the Contracting Officer may furnish the Contractor with suggested revisions to the project schedule. The Contractor shall include these revisions in the project schedule until revisions are submitted, and final changes and impacts have been negotiated. If the Contractor has any objections to the revisions furnished by the Contracting Officer, the Contractor shall advise the Contracting Officer within 2 weeks of receipt of the revisions. Regardless of the objections, the Contractor shall continue to update the schedule with the Contracting Officer's revisions until a mutual agreement in the revisions is reached. If the Contractor fails to submit alternative revisions within 2 weeks of receipt of the Contracting Officer's proposed revisions, the Contractor will be deemed to have concurred with the Contracting Officer's proposed revisions. The proposed revisions will then be the basis for an equitable adjustment for performance of the work.

3.9 OWNERSHIP OF FLOAT

Float available in the schedule, at any time, shall not be considered for the exclusive use of either the Government or the Contractor.

3.10 NAS DATA

The Contractor shall provide the Government with the means to electronically transfer all required NAS data into the Resident Management System (RMS) program using the Standard Data Exchange Format (SDEF). The Contractor may use network analysis software different from that used by the Contracting Officer in the Resident Office, however, the Contractor shall also furnish the following:

NAS data that complies with the Standard Data Exchange Format (SDEF). This is a standard ASCII format for exchanging scheduling data and is compatible with our resident management system. Many software developers provide the capability to convert and export schedule data to the SDEF at no additional cost. The SDEF specifications are in a separate publication, available from the Internet <http://www.usace.army.mil/search.html> - Publications.

END OF SECTION

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Proposal Conference

SIGN IN SHEET

Solicitation No.: W912DW-04-R-0007

Title: Design Build Electrical Upgrade, Howard Hanson Dam, WA

<u>NAME</u>	<u>COMPANY</u>
1. <u>BILL GOSS</u>	<u>COE</u>
2. <u>Sean Kilgrew</u>	<u>Potelco</u>
3. <u>KEITH HART</u>	<u>POTELCO</u>
4. <u>Donald Edgar</u>	<u>Potdco</u>
5. <u>Verdon Green</u>	<u>MOZM Const-Ing</u>
6. <u>STEVE CROW</u>	<u>OLVEST</u>
7. <u>JIM GEBHARDT</u>	<u>STRIDER CONST</u>
8. <u>Mike Morrison</u>	<u>Evergreen utilities</u>
9. <u>Bill Arthur</u>	<u>Superior Electric</u>
10. <u>Mike Tanal'z</u>	<u>FULLERTON PACIFIC</u>
11. <u>John Whitney</u>	<u>" "</u>
12. <u>LIEF CHRISTENSEN</u>	<u>SHAW Environmental</u>
13. <u>Pat Fulerton</u>	<u>Fullerton Pacific</u>
14. <u>GEORGE JILBERTSON</u>	<u>SHAW EDS</u>
15. <u>GARY MARGASIN</u>	<u>PORTLAND CEMENT Distributor Sues</u>
16. <u>MRINAL DECAI</u>	<u>" "</u>
17. <u>THOM FISCHER</u>	<u>CONSTRUCTION WIRE CORP,</u>

Proposal Conference

SIGN IN SHEET

Solicitation No.: W912DW-04-R-0007

Title: Design Build Electrical Upgrade, Howard Hanson Dam, WA

NAME

COMPANY

1. RICHARD ROSENBAUM WHITEWATER ENGR.
2. JOHN GARDNER USACE
3. MIKE CRIFT SALISIT
4. TONY ANDERSON SALISIT
5. JOHN HOSWILLER SCOWMAN
6. CURTIS CUTE CASNE
7. MIKE STEVENS AMAYIT
8. JOHN AMAYIT AMAYIT
9. TODD WILLIAMS WHITE SHIELD INC
10. ROBERT WILSON WHITE SHIELD INC
11. _____
12. _____
13. _____
14. _____
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16. _____
17. _____